

CHAPTER-2

REVIEW OF LITERATURE

The review of literature relating to the study on “**Inter- tribe variation in quality of life in the Nilgiris District of Tamil Nadu**” is discussed under the following headings:

- 2.1. Definition of quality of life;
- 2.2. Methods of constructing quality of life index;
- 2.3. General studies on quality of life;
- 2.4. Tribal welfare programmes during the plan period;.
- 2.5. Studies relating to quality of life of tribals and
- 2.6. Other tribal related studies

2.1. Definition of quality of life:

Smith (1973) proposed that quality of life is limited to individuals' subjective assessment of their lives. Smith (1977) and Milligan (2004) defined quality of life based on the internal conditions that affect individuals rather than subjective needs or perceptions which are related to happiness and other dimensions of well being

A number of researchers- McCall (1975), Myers (1987), Davidson and Cotter (1991), O'Brien and Ayidya (1991), Grayson and Young (1994) and Diener and Suh (1997) have reviewed literature on quality of life and there is general agreement that a meaningful definition of quality of life must recognize that there are two linked dimensions to the concept, namely a psychological one and an environmental one. Cutter (1985) has defined quality of life as an individual's happiness or satisfaction with life and environment, including needs and desires, aspirations, lifestyle preferences and other tangible factors which determine overall well-being. When an individual's quality of life is aggregated to the community level, the concept is linked to existing social and environmental conditions such as economic activity, climate or the equality of cultural institutions. It includes both tangible and intangible measure reflecting local consensus on the community values and goals. According to Friedman (1987) quality of life can be viewed as an indication and also as an effect.

Gentile (1991) observed that psychological, sociological, spiritual and environmental factors were determinants of quality of life and hence quality of life is equated with adequate income and material possessions, good physical health and quality of care, psychological rewards such as feelings of self-worth and self-esteem and social factors such as relationship with others and communication. In the view of Elyse Kerce (1992), quality of life indicates the degree to which the experience of an individual's life satisfies individual's wants

and needs- both physical and psychological. Schwab (1992) stated that quality of life is the difference between what should be and what is in a community - the difference between goal and appraisal status. Therefore quality of life is defined as the measurement of the conditions of place; how these conditions are evaluated by individuals and the relative importance of each of these to individuals.

Becker et al. (1993) defined quality of life as someone's feeling of well-being according to the satisfaction or dissatisfaction with the dimensions of life. The quality of life is related to the dimensions of general life satisfaction, activities and occupations, psychological well-being, physical health, social relations, economics, activities of daily living, symptoms and goal attainment.

According to Brock (1993), quality of life can be defined based on three approaches. The first approach describes characteristics of the good life that are dictated by normative ideals based on a religious, philosophical or other system. The second approach to good life is based on the satisfaction of preferences. Within the constraints of the resources they possess, the assumption is that people will select those things that will most enhance their quality of life. The third approach for the definition of quality of life is in terms of the experience of individuals. In this approach, factors such as feelings of joy, pleasure, contentment and life satisfaction are important.

Farquhar (1995) referred to quality of life as the degree of satisfaction people have about different aspects of their lives. It is related to the extent to which people characterize their existence depending on the amount of pleasure and level of satisfaction they experience. According to Renwick and Brown (1996), the quality of life for an individual is affected significantly by the social environment. Similarly Galambos (1997) defined quality of life as being associated with a goodness of life related to an individual's perceived psychological, spiritual, socio cultural, biological and environmental well-being. Raphael et al. (1997) defined quality of life as the degree to which a person enjoys the important possibilities of life. The enjoyment of important possibilities pertains to experiencing satisfaction or pleasure and the possession or attainment of something.

Marinelli and Plummer (1999) proposed a model of quality of life based on six interactive and dynamic dimensions: physical, emotional, social, intellectual, spiritual and environmental. The physical dimension includes such factors as physical fitness, flexibility, endurance and muscle strength as well as the ability to accomplish activities of daily living. The emotional dimension relates to feelings and a state of satisfaction with family, friends and daily life situations. Sharing companionship, communication, mutual obligations with others and having a sense of belonging are included in the social dimension. The ability to process information, clarify values and beliefs and exercise decision making capabilities make up factors of the intellectual dimension. The spiritual dimension refers to the

relationship to other living things and a deeper understanding of the meaning of life. Lastly, the environmental dimension consists not only of the safety and cleanliness of surroundings but also of such factors as access to health care, availability of care and financial resources.

Kane (2001) identified eleven aspects of quality of life: sense of safety, security and order, physical comfort, enjoyment, meaningful activity, relationships, functional competence, dignity, privacy, autonomy, individuality and spiritual well-being. According to Noronha and Nairy (2005) the term quality of life covers broad terms as satisfaction of needs, feeling of well-being, working conditions and covers the physical and psychological dimension. The quality of life concept focuses not only on income and material resources, but also on other dimension of social welfare and the interaction between them. Rehman, Mittelhammer and Wandschneider (2005) developed a composite index of well being based on eight indicators for social relationship- emotions, health, work, material well being, civil and political liberties, personal security and environmental quality. According to International Society for quality of life studies (2007), quality of life refers to the degree to which a person's life is desirable, often with an emphasis on internal component such as environment and income.

2.2. Methods of constructing quality of life index:

There is now a well-established body of literature on the choice of indicators that purport to measure various aspects of quality of life. Typically each indicator is supposed to reflect the magnitude of a specific dimension/component of quality of life. Quality of life can be disaggregated into a set of components or dimensions and if these are combined correctly then an overall value or score for quality of life can be derived.

According to Schneider (1976), the major indicators of quality of life are income, wealth and employment. Marlin (1992) has focused on health as the major component of quality of life for a survey of the livability of cities in USA. According to Stover and Leven (1992), well being encompasses both objective conditions (i.e.) the degree to which physical needs are being met as well as subjective conditions such as assessment of one's life or domains of one's life.

In the view of Miringoff (1995) ,quality of life is based on the indicators of infant mortality, school dropout, average weekly earnings, health insurance coverage, out-of-pocket health costs, access to affordable housing etc,. According to Lai and McDonald (1995), activity level, general health, psychological health, social support, self-esteem and sense of personal control are the components of life satisfaction index. Friedman (1997) recognized that theological, philosophical and humanistic approaches to the study of quality of life deserve attention. Sen (1999) have elaborated arguments on the need to move

beyond economic indicators to define quality of life and to include freedom, liberty and human capabilities.

World Health Organisation Quality of Life BREF (1998) tried to measure quality of life profile. The instrument comprises of 26 items, which measure the broad domains of physical health, psychological, social relationships and environment. The domain scores denote an individual's perception of quality of life. Domain scores were scaled in a positive direction and the mean score of items within each domain was used to calculate the domain score. The minimum score was 26 and maximum score was 130. This was classified further as 0-26 very poor, 27-52 poor, 53-78 moderate, 79-104 good and 105 -130, very good quality of life.

According to Saxena (1998), the parameters used for estimating quality of life index were housing (type and number of rooms), source of water used, sanitation facilities available, food nutrients intake, health and safety status, educational status, fuel and energy availability, assets possessed, own transportation means and per-capita income. The minimum desired level of score for the above parameters for a fair living condition was defined with a value of 40 on a scale of 0 to 100. All the parameters have been given equal weightage and the total score of QOL index was 100. The classification on the basis of total score used for the analysis was as follows: < 20 poor, 20-40 average, 40-60 fair and above 60 good.

Dissart and Deller (2000) argued that a person's quality of life is dependent on the exogenous (objective) facts of life and the endogenous (subjective) perceptions of these factors. Daphne Greenwood (2000) tried to estimate quality of life based on economic indicators, health and public safety indicators, civic quality indicators, cultural and educational indicators and transportation indicators. The economic indicators used were poverty rate, medium income, percentage of jobs in public sector and jobs in private sector. The health indicators used were infant mortality rate, percentage of rooms used for emergency, .percentage of people with prenatal health care and educational indicators used were graduation rate and per capita library circulation.

Boyer and Savageau (2000) offered a ranking of over 300 metro areas in the United States and Canada using scores for a set of nine indicators that refer to quality of life. The indicators include: climate, housing, health care and environment, crime, transportation, education, recreation, the arts and economics. For each indicator, a standardized score was measured and a cumulative score was calculated for each place using simple additive weighting approach. Canadian Policy Research Networks (2001), have identified the quality of life indicators relating to political rights, health, education, environment, social programme,

personal well being, community, economy and employment. The sub indicators of economics and employment were joint security, employment rate, income, housing, affordability for education, high school completion and high school teacher student ratio. The indicators used for health were illness rates, access to health care and life expectancy rates.

Berenger and Chouchane (2007) formulated quality of life index (QL) and standard of living index (SL) separately. In their view, quality of life index is a combination of nine indicators covering three domains: health, education and environment. On the other hand, standard of living index is based on three domains: standard of health, standard of education and material well being.

2.3. General studies on quality of life:

Dhanasekaran (1991) in the study on socio economic measure of quality of life tried to measure quality of life for 120 households in Gobichettipalayam block, Periyar district in Tamil Nadu. The selected households were stratified in different groups: landless agricultural labourers, rural artisans and service class, marginal farmers, small farmers, big farmers and large farmers. The quality of life was measured based on the indicators of caste, education, occupational category, female earners, household income, per capita income, calorie intake, protein intake, annual food expenditure as percentage of annual income, annual expenditure on clothing per person, type of house, living area per person and number of rooms per person. The respondents were presented with certain indicators and were measured in terms of their relative position on the composite index. The study tried to relate the poverty index with the poverty line incomes at the household level by using breakeven analysis. The distribution of households with respect to various levels of poverty indicated that 3.15 percent of the households were classified as very very poor, 54.33 percent as very poor, 24.41 percent as poor and 18.11 percent as non-poor.

Dhanasekaran (1994) tried to measure rural poverty by using weighted rural quality of life index. The study was related to 244 households in the village of Salem and Periyar District in Tamil Nadu. The study used principal components method for constructing quality of life index by assigning equal weightage to each indicator of the quality of life index. Breakeven analysis was used to relate the poverty line incomes and poverty index of household level. By using regression analysis, the study tried to find out the relationship between composite index and household income. Of the total 244 households, two (0.82 per cent) were classified as destitutes, five (2.05 percent) as very very poor, 34 (13.93 percent) as very poor, 128 (52.46 per cent) as poor and 75 households (30.74 percent) as non poor.

Nick van der Lijn (2000) tried to measure physical quality of life and basic well being for 133 countries in the World. The study constructed PQLI as a weighted average of indices of life expectancy at age one, infant mortality and adult literacy. The minimum and maximum value for life expectancy was 30 and 85 years, for infant mortality it was 0 and 230 and for adult literacy rate it was 0 and 100. The indices were obtained for each social indicator by rescaling the data on a scale from zero to hundred. The study found that between 1975 - 1992, physical quality of life index increased from 72 to 82.

Chandramouli (2003) attempted to estimate quality of living index in Chennai. The main objective was to identify the indicators of housing in Chennai city which are unfavourable to a healthy life and to calculate the composite index based on the indicators for each division of the Chennai Corporation. The indicators selected for the index were: type of house, source of drinking water, source of lighting facility, electricity, available sanitation facilities and type of fuel for cooking. The composite index was computed by using the formula:

$$Z = \frac{X - X_{\min}}{X_{\max} - X_{\min}}$$

where,

X = Value of the indicator for the particular division,

X max = Maximum value of indicator for the particular division

X min = Minimum value of indicator for the particular division

Z = Index for the variable

By using the above formula, indices have been calculated for all the indicators for each division. The sum of these indices divided by the number of indicators give the composite index.

$$Z = \frac{Z_1 + Z_2 + Z_3 + \dots + Z_n}{N}$$

As per the study, 87 percent of the households were living in permanent types of houses. Of this, 89 percent of the households lived in houses that have less than three dwelling rooms. Only 64 percent of the households had access to drinking water within the premises. Electricity was available to 94 percent of the households and 10 percent of the households had no latrines and 11 percent had no drainage. Separate kitchen were not available in 8 percent of the houses and only 81 percent of the households used non-polluting fuels like LPG and kerosene. The study found that the highest range of the composite index of 0.6 to 0.8 was found in 14 divisions. The next category of composite index of 0.4 to 0.5 was classified as medium and this contained 29 divisions. The last category of composite index of less than 0.3 was classified as low and this contained 112 divisions.

Kamalesh Joshi (2003) estimated quality of life among the elderly in Northern India based on data obtained from 200 elderly persons in the rural and urban areas of Chandigarh city. The average quality of life index was estimated as 69 and better quality of life index was seen among those in the lower age groups, literates, urban residents and those with high personal income. As per the study, the most important predictors of quality of life were age and occupation.

Thumboo (2003) tried to examine the impact of ethnicity and socio-economic status on quality of life in urban Asian population. In a disproportionately stratified survey, Chinese, Malay and Indian subjects in Singapore were assessed to determine demographic, socio-economic, psychosocial and other characteristics. Multiple linear regression models were used to study the influence of ethnicity and socio - economic status on SF-36 scores while adjusting for the influence of other determinants of health related quality of life (HRQOL). Ethnic differences in HRQOL were found for all scales except general health among the 4122 Chinese, Malays and Indians surveyed. These ethnic groups also differed in several known determinants of HRQOL. As per the study, ethnicity and socio economic status independently influenced HRQOL, with mean differences in SF-36 scores due to ethnicity ranging from 1.4 to 13.1 points. Educational level and housing type were also associated with SF-36 scores (0.5-0.6 point increase per year of education and 3.5-4.0 point increase with better housing type).

Appo Rao (2006) formulated the factor model for quality of life in towns in East Godavari District. The main objective was to study the effect of prime factors on quality of life

with respect to size class towns over different Census years and to compare the major influencing factors on the quality of life. Based on the District Hand book, village and town Directories for Census 1971, 1981 and 1991, the civic amenities were analysed through principal components approach. The prime factors that contribute to quality of life were extracted which was confirmed to small towns. It was observed that the prominent factors determining the quality of life for all the towns were same as those for big towns and thus provide a bench mark to small towns also.

Braja Kishori Mishra and Tripathy (2008) attempted a study of socio-economic profile and quality of life index of sample households of mining areas in Talcher and Ib Valley Coal Mines in Orissa. The sample survey was conducted covering about 367 households from different villages. The study tried to estimate quality of life index based on the method adopted by Saxena et al (1998). The parameters used for the computation of the quality of life index were housing (type and number of rooms), source of water used, sanitation facilities available, food and nutrition intake, health and safety status, educational status, medical facilities, transport and communication facilities, fuel and energy availability, assets possessed, own transportation means, per capita income and recreational facilities. The minimum desired level of score for the above parameters for a fair living condition was defined with a value of 0.5 on a scale of 0 to 1. All the parameters have been given an equal weightage and the total score of quality of life index was 3. The classification on the basis of total score used for analysis was as follows: <3 – very poor, >3-5- poor, >5-7- fair, >7-10- good and >10-13 -very good. As per the study, about 49.86 percent of the sample households lived in kacha houses, followed by 23.7 percent in pacca houses and the rest living in mixed type houses. The overall quality of life index ranged from 2.93 (very poor) to 4.12 (poor) with overall average score of 3.27.

Edward Kironji (2009) analysed quality of life in South Africa based on household development model. The study measured quality of life based on household income, per capita income, consumer confidence index, economic well being index etc. The study found that female headed households were generally predominant in groups with poor quality of life. The application of discriminant analysis highlighted that access to toilet and water source were discriminate indicators in addition to highest level of education completed by the household head and employment status of household head.

Chukwudum Uche (2009) tried to estimate the quality of life of Jamaica's elderly population. The study was based on the data collected from 20236 elderly persons. The results of the analysis showed that the elderly suffered from the usual chronic diseases of arthritis, diabetes and hypertension but were competent in performing activities of daily

living. The estimated logistic regression indicated that age, sex, marital status and education were significant factors influencing access to social welfare measures.

Margareth Guimaraes Lima (2009) attempted a study of health related quality of life among the elderly population. The required data were collected from 1,958 individuals aged 60 years or more. Health related quality of life (HRQOL) was assessed using the SF-36 questionnaire. As per the study, scores of quality of life were the lowest in the dimensions of vitality (64.4), mental health (69.9) and general health (70.1). Highest scores were obtained in the scales of role-emotional (86.1), social functioning (85.9) and role-physical (81.2). Comparing years of education, better health related quality of life was observed among those with more years of schooling. Differences were significant in all scales, except role-emotional and social functioning, between the segment with nine or more years of schooling and that with less than four years of schooling. Differences were non significant between the stratum with four to eight years of schooling and that with less than four years in the scales of general health, vitality, social functioning, role-emotional and mental health.

Nirmala Vranda and Reddy (2011) tried to examine the quality of life of married women. The sample consisted of total 90 married working women between the age group of 20-50 years. The women who were married at least for three years, living with spouse and engaged in work for at least one year were included in the study. The study tried to measure quality of life based on 26 items relating to the domains of physical health, psychological, social relationships and environment. The mean score of items within each domain was used to calculate the domain score. The minimum score was fixed as 26 and maximum score was 130. This was classified further as 0-26 very poor, 27-52 poor, 53 – 78 moderate, 79-104 good and 105-130 as very good. The mean quality of life of respondents in the domain of physical health was 15.32, psychological health was 14.13, social relationships was 16.55 and for environment it was 14.14. The study revealed that women having more than three children working in industrial setting had significantly poor quality of life especially on the domains of psychological health and social relationship.

Rashid Ashraf Wari and Vijaya Kairthe (2011) estimated the quality of life of people in Srinagar city based on the data obtained from 1045 households belonging to different income groups. The study revealed that the quality of life of very higher income groups was far better than the low and middle income group. The very high income group had good sanitation and housing conditions, good assets and good educational status as against the low income groups.

Venkateswara Rao (2011) examined the levels of living of rural households in Guntur District of Andhra Pradesh. The study was based on data obtained from 120 households. As

per the study, annual average per capita consumption expenditure for all sample rural households was Rs.5643, for cultivator households it was Rs.6020 and for agricultural labour households it was Rs.4223. The share of food expenditure in total expenditure was 63 percent for cultivators, 86 percent for agricultural labourers, 61 percent for other villagers and 65 per cent for all sample rural households. In the case of expenditure on education, only Rs.236.52 was spent by agricultural labourers and the average of all households was Rs. 391.64. The annual per capita expenditure on health was very low in the case of agricultural labourers (Rs.105) compared to the average of combined group (Rs. 210.49).

Aghamolaei (2011) attempted to identify the determinants of health related quality of life of people living in Iran. Using a multistage sampling method, a random sample of 1675 individuals, aged 15 years and over was interviewed through SF-36 questionnaire. The study had measured quality of life index in eight subscales: physical functioning (PF), role limitations due to physical problems (RP), body pain (BP), vitality (VT), general health (GH), social functioning (SF), role limitations due to emotional problems (RE) and mental health (MH). As per the study, majority of the participants were females (50.4 percent), married (70.9 percent) and employed (36.8 percent). The range of years of schooling for most participants (56.7 percent) were from six to twelve years. To examine the association between participants' characteristics and their HRQOL, t-test and one way analysis of variance (ANOVA) were performed. The results showed that the factors like sex, age, education and employment status were significant determinants of quality of life. Multiple logistic regression analysis was used to predict determinant factors on health related quality of life. The study found that female participants had significantly poorer HRQOL than males in all aspects except for role emotional.

Pichaipillai and Kalyani (2012) examined the quality of life of elderly population. The study was related to 240 elderly people in four zones of Coimbatore District. The study tried to estimate the quality of life based on the parameters of economic status, level of dependency, family parameters, social factors, health factors, psychological factors and environment factors. By using the five point Likert rating scale, the satisfaction of the elderly population was measured. In order to frame the quality of life index, the composite index method was applied to attain single value. For constructing the index, minimum and maximum values have been fixed for each of the indicators. The minimum and maximum values were 0 and 1 respectively. The following composite equation was used to calculate quality of life index of elderly population.

$$\text{Index} = \frac{\text{Actual value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}}$$

Maximum value – Minimum value

The dimensions of economic status were stable financial situation, ability to meet the basic needs, freedom to spend, ability to meet health care expenditure, capacity to help the children and capacity to borrow money. For the dimension of dependency, the study used indicators of economic dependency, physical dependency and financial aid from the children, from friends, from relatives and from neighbours. For the dimension of family parameters the study used the indicators of harmony within the family, moral support in the family, importance given in the family, participation in decision making, care taken by the family, help from the family members and visiting relatives and others. The indicators used for social dimension were respect in the society, participation in the social functions, in public programmes and social security measures. The indicators used for dimension of health were satisfaction with health, access to medical services, awareness about health, family support at the time of ill health, having good nourishment, free from physical disability etc.,. The indicators used for the dimension of psychological factors were free from worries, free from depression, free from burden, having peace of mind, having satisfaction in life, satisfaction in family environment and satisfaction in societal environment. For dimension of environment, the indicators used were peaceful living environment, hygienic environment, having recreation options, pollution free environment, opportunities for spiritual activities, opportunities for friendship and discussion and opportunities for senior citizen's associations. The quality of life of index was estimated as.

$$QLI = \frac{\text{Economic index} + \text{Dependency index} + \text{Family index} + \text{Social index} + \text{Health index} + \text{Psychological index} + \text{Environmental index}}{7}$$

The study estimated the quality of life for elderly male population as 0.49 and for the female elderly population as 0.37. The quality of life score was found to be higher for middle old to the extent of 0.47 followed by young old 0.45 and it was least in old-old category (0.39). The quality of life score was found to be higher for the independent (0.67), followed by partially dependent (0.47) and least for dependent (0.18). The quality of life score was higher for the elderly people living with their own family (0.50), followed by living with children's family (0.46) and least for relative's family (0.32).

Krishna kumar Mishra (2012) examined the health related quality of life of men and women living in urban and rural settings. The sample consisted of 400 males and females of 15 to 70 years drawn from Varanasi District. The study tried to analyse four domains of QOL namely, physical health, psychological status, relationship and environment. As per the study, urban participants scored significantly higher than the rural participants in

psychological health, social relationships and environment domains of the quality of life. These differences were linked to gender of the participants. As per the study, rural setting males and the urban setting females had better quality of life.

Zaden and Anoshiravan Kazemnejed (2012) analyzed the health related quality of life of retired older people in Tehran city. The study was related to 321 men and 146 women aged 60 and above. The study found that quality of life was significantly higher in the younger group while the scores for the mental health domain was significantly higher in the older age group. As per the study, 98.7 percent of the sample were employed after retirement and this may be an indication of sufficient retirement salaries for making a living

Sujoy Dasand Niranjan Roy (2013) attempted an inquiry into the quality of life of people living in industrial area of cacher paper mill. The study was based on primary data collected from 174 households in industrial zone and 227 households in non-industrial zone. The study tried to define quality of life (QOL) as a composite index which is the average of three other indices- material well being index (MWBI), educational attainment index (EAI) and health index (HI). The study used seven indicators of material well being index: family income, housing condition, availability of electricity, owning vehicles, owning T.V. set, owning mobile set/ telephone and modern cooking instrument (LPG). The health index represented occurrence of disease in a family during the period of six months.

Educational attainment index was constructed as follows.

$$EDAI = \frac{TES/N}{4}$$

where,

$$\text{Total educational score (TES)} = n_1 \text{ illiterate (0)} + n_2 \text{ primary (1)} + n_3 \text{ secondary (2)} + n_4 \text{ higher secondary (3)} + n_5 \text{ college (4)}.$$

Where, $N = n_1 + n_2 + \dots + n_5$

N incorporate family members of more than 21 years of age.

Quality of life index (QOL) was computed by taking geometric mean of material well being index (MWBI), health index (HI) and educational attainment index (EDAI).

By using ANOVA the study tried to find out relationship between quality of life and industrial set up. The study found that the average QLI in industrial region was 0.47 and in the non - industrial region it was 0.39. The result of ANOVA implies that there was substantial positive relationship between QLI and an industrial set up. However, both ANOVA and regression analysis indicated that health related quality of life in industrial

region was worse than non- industrial region. The study recommended that it is essential to raise the efficacy of environmental monitoring programme, health services in industrial region and expanding health awareness among people in the industrial region by imparting necessary education.

Pandian (2013) attempted a study on quality of life for the higher secondary school teachers in Puducherry. The basic objectives of the study were to find out whether there is any significant difference between the rural and urban higher secondary teachers with respect to their quality of life and to find out whether there is any significant difference among the higher secondary teachers in quality of life in different types of schools. The study was based on data collected from 240 higher secondary school teachers in Puducherry. The study estimated quality of life in rural area as 82.63 and urban area as 5.90. The quality of life for teachers employed in Government higher secondary schools was found to be the highest (81.40) as compared to teachers employed in private higher secondary schools (75.37).

2.4 Tribal welfare programmes during the plan period:

In India, Five year plans provided a great impetus to tribal welfare activities by making ample funds available for their implementation. The First Five Year Plan (1951-56) provided Rs.30 crores for tribal welfare. The Second Five Year Plan (1956-61) allocated a total of Rs.47 crores. During the Second Five Year Plan, tribal development blocks were created for speeding up the welfare activities for the tribals. During this period, the massive programme based on integrated approach was initiated by organising 43 special multi-purpose tribal blocks in areas with tribal concentration and such programmes required an expenditure of Rs.6.42 crores, During the Third Five Year Plan (1961-66) greater emphasis was placed on higher food production and individual farm production plan was initiated. The expenditure went up to Rs.53.40 crores during this period and the integrated development benefits have been made available to all the tribal areas through 489 tribal development blocks opened by the end of 1966-67 on the basis of the recommendation made by the Elwin Committee⁵ and Dhebar Commission⁶. Economic upliftment was given top priority during the period, followed by education, health and housing schemes and communication. During 1966-69, annual plans were implemented with the same thrust areas and priorities. During the three annual plans, an expenditure of Rs.34.64 crores was allotted for tribal welfare activities. In 1966, Shilu Ao⁷ team was set up to examine the working of the tribal development programmes.

During the Fourth Five Year Plan (1969-74), six pilot projects in the backward tribal areas covering about 40,000 tribal families under each project, with an investment of Rs.150

crores were introduced. The projects were agriculture oriented, with stress on providing improved agricultural inputs like implements, fertilizers, seeds, irrigation facilities, etc, besides developing veterinary services, fisheries etc.

In the Fifth Five Year Plan (1974-1979), for the first time, a strategy of earmarking funds for the development of scheduled tribes was evolved. The programmes prepared for the welfare of scheduled tribes altogether covered an amount of Rs.500 crores. For the scheduled tribes, the instrument of tribal sub-plans was developed to ensure flow of benefits from all programmes and to provide integrated delivery of services in the tribal areas. Accordingly separate sub-plans were formulated, in 16 states and two union territories covering 63 percent of the tribal population in the country. The tribal sub plan areas were divided into 180 integrated tribal development projects for operational purposes.

In the tribal sub plan the following approach was envisaged:

- In regions of substantial tribal concentration, an area development approach is to be combined with a focus on the tribal population and their problems;
- In smaller areas of dispersed tribal population where the scheduled tribes live merged with the general population, a modified area approach on account of the truncated nature of the habitat but with similar focus on the tribes would be called for; and
- Certain extremely backward and smaller tribal groups living in inaccessible areas and facing the problem of their very survival would be treated as a special category both within the areas of tribal concentration and outside and special group oriented programmes would be formulated for them.

These three categories were brought respectively under integrated tribal development projects, modified area development approach and pockets and primitive tribe projects.

The other salient features of the tribal sub plan strategy comprise:

- Identification of tribal majority development blocks and their constitution into integrated tribal development projects (ITDPs) with a view to adopting therein integrated approach for development.
- Formulation of integrated project for each ITD keeping in view the natural resources of the region and the skills and aptitude of population and
- Adoption of appropriate administrative structure in tribal areas and adoption of appropriate personnel policies.

In the Sixth Five Year Plan (1980-85), some further areas of tribal concentration were proposed to be brought within the ambit of tribal sub-plans, by identifying tribal pockets of 50 percent concentration in a population of 10000. To fulfill the objectives for tribal development under the newly formulated strategy, an outlay of Rs.4006 crores was made. Against this outlay, an amount of Rs.4694 crores was actually spent.

During the Seventh Five Year Plan (1985-90), Rs.7074.50 crores were expended against an outlay of Rs.6126.76 crores under flow from states plan to tribal sub plan. Under special central assistance, Rs.847 crores were spent against an outlay of Rs.756 crores. At the end of Seventh Plan in 1989-90, the TSP strategy was being implemented through 191 tribal development projects, 268 modified development approach blocks, 74 clusters and 74 primitive tribal group projects.

Tribal development strategy during the Eighth Five year Plan (1992-97) pays special attention to vulnerable groups, especially tribal women. During the plan period, a provision of Rs.1250 crores had been made for special central assistance in tribal plan and Rs.3086.06 crores for the state plans under backward classes sector which had a share for scheduled tribes as well.

The Ninth Five Year Plan (1997-2002) has committed to achieve all round development of scheduled tribes through social empowerment and social justice. The National scheduled Tribes Finance and Development Corporation (NSFDC) was empowered to function as a catalytic agent for training, facilitating and mobilizing funds from various schemes for promoting economic development activities among scheduled tribes living below poverty line. Distribution of free house site, pattas, construction of houses for poor tribals and provision of infrastructural facilities to scheduled tribes habitations were the prime priority areas in the Ninth Plan. Nearly 2.59 lakh house site pattas were issued and 1.38 lakh houses were constructed. In Ninth plan, supply of protected drinking water facilities was provided to 12387 habitations and 25 community halls were constructed with an outlay of Rs.775 crores.

Tenth Five Year Plan (2002-2007) adopted a three pronged strategy of empowering the socially disadvantaged group through social empowerment, economic empowerment and social justice. For social empowerment, Tenth plan tried to improve the educational status of scheduled tribes on a time bound basis, improving enrolment rate by ensuring easy access and special coaching through scholarships. For economic empowerment, Tenth plan laid emphasis on development of small entrepreneurship through formation of self help groups, modernization of skills, optimizing the traditional ability of scheduled tribes in agricultural production and reinvigorating of on-going poverty alleviation

programmes. For social justice, Tenth plan emphasized three pronged strategy of awareness generation, conscientisation of the target group and sensitizing both officials and non officials. An outlay of Rs. 1200 crores had been provided for the welfare of scheduled tribes and anticipated expenditure during the Tenth plan was Rs. 1044.16 crores.

During the Eleventh Five Year Plan (2007-2012) ,the Ministry of Tribal Affairs has recommended the following measures for the socio-economic development of the tribals:

- Support services for rehabilitation especially for women and children along with economic activities, education and training and protection from violence must be provided.
- Plans for rehabilitation should use a cluster approach and be women centred.
- There should be clear-cut demarcation of land for tribal communities. Wherever there are over 20 families, there should be no intrusion from other communities for any purpose.
- Adequate infrastructure- housing, clean water, drainage, roads, toilets, streetlights, burial grounds to be ensured in tribal settlement as a basic right.

In 2007, the Ministry of Tribal Affairs, notified the following Acts for the welfare of the scheduled tribes.

- The scheduled tribes and other traditional forest dwellers (Recognition of Forest Rights), Act, 2006, notified for operation with effect from 31st December 2007 and.
- The scheduled tribes and other tradition forest dwellers (Recognition of Forest) Rules, 2007 for implementing the provision of the Act notified on 1st January, 2008

The major legal rights recognized under the Act are:

- Right to cultivate forest land subject to a ceiling of 4 hectares
- Right to collect, use and dispose of minor forest produce.
- Right inside forest which are traditional and customary e.g. grazing.

In the Twelfth Five Year Plan (2012-17), the approach to the tribal development has undergone a considerable change over the period commensurate with the felt needs and priorities of these communities. The goal is to a bridge gap, between tribes and non-tribes in human development indices. Special emphasis was given on education, promotion of literacy in tribal communities in general and girls in particular with special attention to low

female literacy pockets, Tribal blocks with female literacy of less than 20 percent will get special attention. The department will strive to ensure cent percent enrolment of all children in the elementary level between the age group of 5 to 14 years. The department will also ensure to improve literacy by converting elementary schools into ashram schools.

Since dropout is a major intriguing problem in the way of retaining all the school going children in primary and secondary level, concerted efforts will be taken to arrest drop-out tendencies through various support schemes like mid day meals, free uniform, sweater, shoes, socks, scholarship, distribution of bicycles, free text books etc. Opening of more high schools, higher secondary schools, ashram schools and hostels in all 89 tribal development blocks would help to increase literacy rate among primitive tribal groups. School of excellence and excellence hostels at District and Block headquarters will be strengthened with the objective to provide quality education. Students living in other hostels will also be given special coaching in mathematics, science and english subjects. All educational institutes will be facilitated with furniture, laboratory and library and training will be imparted to all teachers to improve their teaching skill. To achieve the above objectives, an outlay of Rs 11,086 crore was proposed for 12th Five Year Plan.

2.5. Studies relating to quality of life of tribals

Pramod Kumar (2001) attempted a study on the **Levels of living of Kurumbas tribes in the Nilgiris District of Tamil Nadu in India**. The basic objectives of the study were to analyse the socio economic condition of Kurumbas, pattern of asset holdings, income distribution and the extent of inequality of different occupational categories, measure the extent of poverty, construct the tribal quality of life index at household level and to know the discriminating power of each indicator in the index. The study was based on primary data in 24 selected villages of Nilgiris District. The required information was obtained from 347 Kurumbas households. The study tried to estimate quality of life index based on the indicators of social status, income status, nutrition status and clothing expenditure.

As per the study, about 66.28 percent of the Kurumbas in the sample population were recorded as literates. The average asset distribution showed that all categories of household were concentrated in the range of asset of Rs.20000 to Rs. 35000 except those in Government services. The study noted that 54 percent of landless labourers, 44 percent of marginal farmers, 25 percent of small scale industrial workers and more than 35 percent of other service households consumed less than the required calories. About 63, 69 and 72 percent of households were landless labourer category, marginal farmers and other services labour category and they respectively spent less than Rs.200 annually on clothing. The study noted that 42 percent of landless labourers, 40 percent of marginal farmers, 22

percent of small farmers, 13 percent of small scale industrial workers and 23 percent of other service households had houses of less than 15 square meters of living area. About 84 percent of landless labourer households did not seek health care where as 85 percent of large scale industrial workers and government service categories sought health care.

Break - even analysis was used to relate the poverty index with the poverty line income at the household level. The cut-off index value was 30.64 to classify the households into poor and non-poor households. It was found that there was statistically significant positive relationship between the quality of life index (TQLI) and per capita income. TQLI explained 70 percent of variation in per capita income and about 67.72 percent of households were classified as non-poor.

Palanisamy (2002) tried to analyse **The economic condition of the primitive tribes in the Nilgiri District of Tamil Nadu**. The study was related to Todas, Kotas, Irulas and Paniyans tribes of Nilgiris District. The specific objectives were to study the socio-economic conditions of the four tribal groups, analyse the pattern of income, expenditure and the extent of inequalities, analyse the level of asset holdings, measure the extent of the poverty level and to suggest the suitable strategies for the improvement of the socio economic conditions of the four tribals. The study covered 710 tribal households by following multi stage stratified random sampling method. The study tried to calculate gini coefficient ratio and used lorenz curve. The study tried to estimate poverty level based on head count ratio, poverty gap ratio and Sen's index. The study found that the average per household land value was higher for Todas (Rs.3, 71,052) followed by Kotas (Rs.2,78,316.83). Irulas (Rs.1,95,155.04) and Paniyans (Rs.96, 592.36). Total asset value was high among Kotas (Rs.1,00,56,100) followed by Irulas (Rs.66,49,200), Todas (Rs.65,23,450) and Paniyans (Rs.49,69,250). Among different source of income, about 44.11 per cent of their income was earned through agricultural wages, followed by 26.86 percent from crop production. There were more inequalities in the distribution of assets for Paniyans tribe while Kotas tribe have more income inequalities and consumption inequalities. According to the study, 63.64 percent of Todas, 71.60 percent of Irulas and 77.39 per cent of Paniyans tribes were below the poverty line. To improve the economic condition of primitive tribes the study recommended the provision of education facilities, infrastructure facilities, restructuring the school curriculum and providing job oriented education for tribal children.

Beck and Mishra (2010) formulated a study on **Socio economic profile and quality of life of selected Organ tribals living in and around Sambalpur town, Orissa**. The main objective of the study was, to analyse the socio economic condition of the selected organ tribal families along with the infrastructural facilities available in the locality and to evaluate the quality of life of the tribal people. The required data had been collected from 120 Organ

tribal households. For estimating quality of life index, the study used the parameters of housing, source of water, available sanitation facilities, food nutrients intake, health and safety status, educational status, fuel and energy availability, assets possessed, own transportation means and percapita income. The minimum desired level of score for the above parameters for a fair living condition was defined with a value of 40 on a scale of 0 to 100. All the parameters have been given equal weightage and the total score of quality of life index was 100. The classification on the basis of total score used for the analysis was as follows: <20- poor, 20-40 average, 40-60- fair and >60 good.

The study found that the housing condition of 95 percent of native tribals was poor with a mean score of 2.29 and standard deviation of 1.13 and rest 5 percent have average housing condition with a mean score of 6. Almost 98.3 percent of native tribals come under poor category in the source of water because they fetch water from common source of water from the bore well in their area and only 1.7 percent of family have their own well with motor fitted in it. All native tribals come under poor category in sanitation facilities as no family had toilet in their houses. It revealed that 65 percent come under the poor category of food intake, 31.7 percent families come under the average category and 3.3 percent of native tribals have fair food intake. However 85 percent of natives were illiterate and hence they were poor in their educational status, 13.3 percent of natives come in the average group and only 1.7 percent come under the fair group regarding their educational status. As per the study, natives owned less material assets and 61.7 percent were poor in assets possession group with a mean score of 2.05 and standard deviation of 0.22 and rest 38.3 percent come under average category having a mean score of 4.91 and standard deviation of 0.09. The study found that 35 percent of migrant tribals had per capita income between Rs. 3000 to 5000 and 18.3 percent of migrant tribals had per capita income between Rs.5000 to Rs.10,000. As per the study, only 2 percent of migrant tribal families have average quality of life, 23 percent have fair quality of life and 75 percent have good quality of life whereas among natives, 42 percent have poor quality of life and the remaining 58 percent have average quality of life.

Debjani Roy (2012) analysed **Socio-economic status of scheduled tribes in Jharkhand**. The study was based on the information compiled from Census of India, 2011. As per the study, between 2001-2006, the per capita income in Jharkhand increased from Rs. 10360 to Rs.14990. The poverty rate for Jharkhand was 58 percent as against the All India level of 37 percent for 2004-05. The literacy rate among tribals in Jharkhand was 40.7 percent for men and 10 percent for women. Participation in household industries was low (3.21percent) for all tribal

communities and more than 90 percent of marginal workers were engaged in primary sector only.

2.6. Other tribal related studies

Amar kumar singh et al (1989) in the study on educational status of the tribals in Jharkhand noted that the highest literacy rate was in the tribal group of Kharia (24.86 percent) followed by Oraos (23.28 percent) and Nunda (22.16 percent). Sailahale Devi and Tapasdash (1990), estimated the disparity index of literacy rate of non scheduled tribes and scheduled tribes as 0.52. Sujatha (1996) by attempting a review of research on tribal education tried to examine the relationship between various aspects of family background and educational participation. As per the study, the differential income levels and size of land holding of households had influence on educational participation of children

Bhattacharjee (1996) attempted to study the economic –demographic changes in the tribal societies of Tripura. The study was related to Tripuri, Riang, Jamatia, Chakma, Halam, Noatia, Mog, Kuki, Garo, Munda and Orang tribal groups. As per the study, the Jamatias had the highest sex ratio (999.3) followed by the Kukis (985.9) and the Tripuris (958.3) and the Orangs had the lowest sex ratio (915.4). The study noted that percentage of workers in the tribal societies in Tripura as a whole had declined from 51.59 percent in 1961 to 31.55 percent in 1971 and to 41.25 percent in 1981. In 1961, the Kuki had the highest female work participation rate (47.78 percent) closely followed by the Jamatia (47.6 percent) and the Reang (46.61 percent).

Sujatha (1999) examined educational status of scheduled tribes in India by studying community schools in the District of Vishakhapatnam, Andhra Pradesh. The study attempted to analyse public initiatives to activate marginalized communities towards education. As per the study, the enrolment ratios at the primary stage have increased from 1993-94 to 1997-98. The girls have a lower enrolment ratio compared to boys and the drop- out rate among boys and girls was very high. The study found that in tribal areas, the average household expenditure in community school was Rs.262 as against Rs.198 for the aided schools. In sample community schools, the dropout rate was only 6 percent in Grade I as against 9 percent in formal schools and 4 percent in private aided schools.

Mona Sedwal and Sangeeta Kamat (2001) investigated educational status of scheduled tribes with specific reference to elementary education. The study found that the economic costs to scheduled tribes households were very high, given that 'schooled' children have lost their ability and inclination to contribute to the

household economy thereby further impoverishing the family. The reluctance of parents to keep their children in school can be traced to the disconnection between school education and their prospects in the economy. The study found that 30 percent of scheduled tribe population habitations had a primary school within one kilometre and 11 percent of scheduled tribe population did not have schools located within two kilometres of their habitation. It also noted that scheduled tribe households spend Rs. 966 per child per year in Government schools.

Ali (2003) in the study on the health status of scheduled tribes in India noted that among most of the tribes, gastro intestinal disorders particularly dysentery and parasitic infestations were very common leading to morbidity and malnutrition. Ranjan (2003) studied the health and nutritional status of tribal population in Jhabua and Dhar District of Madhya Pradesh. The study found that the process of transition in the health and nutrition status of tribal population in the two Districts is extremely slow despite all investments in the health sector. Sharma (2003) in the study on trends of morbidity among Bhatias of Patakot, Madhya Pradesh noted that awareness regarding health and related aspects should be enhanced through different devices, so that health status of Bhatias must be uplifted to a certain extent. Pandey and Tiwari (2003) in the study of socio cultural factors affecting the primitive tribes of Madhya Pradesh found that the majority of the primitive tribes of Madhya Pradesh were living below poverty line and were illiterate. They have a number of misconceptions, irrational beliefs regarding birth related practices which in turn affected reproductive health of the women.

Lakhwinder Singh and Gupta (2003) attempted to investigate health seeking behaviour and healthcare services in Rajasthan. The study revealed that tribal people did not pay much attention to the routine problems during ante-natal, natal and post-natal periods. In the case of reproductive health problems and general health problems, at the first stage, some treatment was administered at home, followed by a visit to the local faith healer and a herbalist. The next stage involved visiting a nurse or unqualified medical practitioner, depending upon availability and it is only in very advanced stage of the problem the help of a qualified medical person was sought.

Patel (2004) by analysing educational status among Varil tribes in Gujarat tried to examine the causes which prevent the children and their parents from showing interest in

education. The study found that the enthusiasm on the part of the parents was less due to lack of awareness. Sundaru Roa and Ram Babu (2004) analysed inter tribe variation in literacy level in Srikakulam District in Andhra Pradesh. The study noted that 32.22 percent of households have completed primary education, 6.11 percent have completed secondary education and 61.67 percent were illiterates.

Balgir (2006) investigated the health problem among the tribes of Orissa. The study noted that the primitive tribes in India have distinct health problems, mainly governed by multidimensional factors such as habitat, difficult terrains, varied ecological niches, illiteracy, poverty, isolation, superstitions and deforestation. The communicable diseases prevalent among the tribes of Orissa were tuberculosis, hepatitis, sexually transmitted diseases (STDs), malaria, filariasis, diarrhoea and dysentery, jaundice, viral and fungal infections, conjunctivitis, scabies, measles, leprosy, cough and cold and HIV/AIDS, Further the distribution of sickle cell disorders varied from zero percent to 22.4 percent among 18 major tribes and high frequency of the disorders was observed among the Gond (22.4 percent), Bhatra (18.1percent), Paraja (14.8 percent), Kharia (7.4 percent) and Saora (7.3 percent).

Prakasa Rao (2008) by studying the health care in tribal areas observed that the tribal people were suffering from many diseases like viral fever, malaria etc, and there were shortage of trained manpower in tribal health services in the country. Hence there should be proper provision of preventive and basic curative services for the tribal people.

Antara Dhargupta (2009) estimated the effect of the socio-economic parameters on health status of the tribes of West Bengal covering 320 tribal households. The study used chi-square test of significance for analysis of data. The study found that Sabar respondents were mainly involved in labour class and due to their occupation they earned very low income.

Satwanti Kapoor and Renu Tyagi (2010) have examined emerging health threats among primitive tribal groups of Madhya Pradesh. The study was related to 364 Saharia tribals in the age group of 18 to 60 years. The study found that relatively higher percent of males (8.9 percent) than females (7.1 percent) were belonging to pre-diabetic category. The study highlights that socio-economic transition along with lifestyle modifications can result in urgent health problems even in a primitive tribal group like Saharia.

Krithiga (2011) examined the educational status of scheduled tribes in Nilgiris district with the specific objectives of analysing the inter tribe variation in education and identifying the determinants of demand for education among the tribals. The study was related to 500 households from the tribal groups of Todas, Irulas, Kurumbas, Kotas and Paniyans in Udhamandalam, Coonoor, Kotagiri, Gudalur and Pandalur Taluks. The study used probit model and binary logistic regression model. As per the study, the enrolment rate was the highest for Todas (93.33 percent) and there had been low gender disparity index in enrolment among the Todas (0.2278). Father's occupation, land ownership and distance to school and earnings were identified as the main factors affecting , probability of sending boys and girls to schools positively. Father's education, mother's education, father's occupation and mother's occupation have a negative impact on dropout. Non availability of schools, inadequate facilities in the schools and long distance were identified as the problems in tribal education.

Sandhya Rani and Rajani (2011)) attempted an analysis of present status of educational facilities availed by tribal girls based on reports of the University Grants Commission, New Delhi, Census of India, 2001 and the Report on Selected Educational Statistics, 2007. The study noted that between 1961 to 2001, the literacy rate of tribal women increased from 2.90 percent to 59.87 percent and the number of girls pursuing various courses for higher education was more compared to males. The study recommended that adequate educational opportunities are to be provided so that they get motivated to participate, support and also ultimately learn to initiate their own programmes of development.

Ravi Shankar (2012) formulated a study on gynaecological symptoms among tribal community in India. The main objective of the study was to explore the pattern of early pregnancies in the young tribal community and study the influence of socio- economic and demographic characteristics on elderly pregnancy. The data were related to 2527 tribal women. The occupational analysis indicated that half of the young tribal women were not working and 40 percent were engaged in agricultural activities. The mean marriage age of women was 16.48 years. By using logistic regression, the study found that early pregnancy was significantly caused by the age at marriage, educational attainment and occupational status of women.

Subha Kumar (2013) formulated a study on levels of literacy and health conditions among the tribal areas in Andhra Pradesh. The basic objectives of the study were to examine the awareness of the tribals about educational programmes implemented in the study area, examine the economic status of the sample

households and examine the relationship between health status and level of education. The study was based on the data collected from 300 households in Rampachodavaram and Maredumilli Mandals in the East Godavari District. The study applied ordinary least square regression model. The study found that, most of the parents were thinking that the education to their children is not necessary because of financial crisis. Majority of respondents in the selected areas have awareness about essential health care programmes and they maintained village health registers and health information boards. The significant factors which determine, the impact of economic and non- economic elements on the health status of the tribal respondents were health awareness, existing health facilities, income, outstanding loans, household durables and farm assets.

A close perusal of existing literature revealed that there have been limited research studies concentrating on the quality of life of tribals. Even the existing studies tried to analyse the quality of life of single tribal group. Little research had been undertaken to compare the quality of life of different tribal groups – Todas, Kotas, Kurumbas, Irulas, Paniyans and Kattunayakans. Hence the current study on **“Inter-tribe variation in quality of life in the Nilgiris District of Tamil Nadu”** is a pioneering research study and expected to fill up the research gap.

